

<b>SECTION V-D - DTV BROADCAST ENGINEERING DATA</b>	<b>FOR COMMISSION USE ONLY</b>	
	File No.	_____
	SSB Referral Date	_____
	Referred By	_____
Name of Applicant <b>GEORGIA PUBLIC TELECOMMUNICATIONS COMMISSION</b>		Call Letters (if issued) <b>WGTV</b>

Complete Questions 1-5 of the Certification Checklist and provide all data and information for the proposed facility, as requested in Items 1-22, below. If an item is not applicable, enter N/A.

**Certification Checklist:** A correct answer of "Yes" to all of the questions below will ensure an expeditious grant of a construction permit. An answer of "No" will require additional evaluation of the applicable information in this form before a construction permit can be granted.

1 The proposed DTV facility complies with 47 C.F.R. Section 73.622 in the following respects:

- |  |   |  |
|--|---|--|
| (a) It will operate on the DTV channel for this station as established in 47 C.F.R. Section 73.622.  | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No |
| (b) It will operate from a transmitting antenna located within 5.0 km (3.1 miles) of the DTV reference site for this station as established in 47 C.F.R. Section 73.622.   | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            |
| (c) It will operate with an effective radiated power (ERP) and antenna height above average terrain (HAAT) that do not exceed the DTV reference ERP and HAAT for this station as established in 47 C.F.R. Section 73.622.  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            |
| 2. The proposed facility will not have a significant environmental impact, including exposure of workers or the general public to levels of RF radiation exceeding the applicable health and safety guidelines, and therefore will not come within 47 C.F.R. Section 1.1307.   | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            |
| 3. Pursuant to 47 C.F.R. Section 73.625, the DTV coverage contour of the proposed facility will encompass the allotted principal community.  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            |
| 4. The requirements of 47 C.F.R. Section 73.1030 regarding notification to radio astronomy installations, radio receiving installations and FCC monitoring stations have either been satisfied or are not applicable.  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            |
| 5. The antenna structure to be used by this facility has been registered by the Commission and will not require reregistration to support the proposed antenna, OR the FAA has previously determined that the proposed structure will not adversely effect safety in air navigation and this structure qualifies for later registration under the Commission's phased registration plan, OR the proposed installation on this structure does not require notification to the FAA pursuant to 47 C.F.R. Section 17.7. | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            |

**Application Data:**

1. Channel

(a) DTV Channel No. 4

(b) Associated analog TV station channel no., if any 8

2. Principal community to be served:

City or Town <b>ATHENS</b>	State <b>GA</b>
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3. Effective radiated power (average power): (in the main lobe of radiation, if directional)

17 kW

4. Height of antenna radiation center above average terrain (HAAT): (to the nearest meter)

304 meters

**Section V-D -D TV BROADCAST ENGINEERING DATA (Page 2)**

**5. Purpose of Application:** *(check appropriate boxes)*

- |  |   |
|--|---|
| <input type="checkbox"/> Construct a new (main) facility                         | <input type="checkbox"/> Construct a new auxiliary facility               |
| <input checked="" type="checkbox"/> Modify construction permit for main facility | <input type="checkbox"/> Modify construction permit for auxiliary antenna |
| <input type="checkbox"/> Modify licensed main facility                           | <input type="checkbox"/> Modify licensed auxiliary antenna                |

If purpose is to modify, indicate the nature of change(s) by checking appropriate box(es) and specify the file number(s) of the authorizations affected.

- |  |  |
|--|--|
| <input type="checkbox"/> Antenna supporting structure height             | <input checked="" type="checkbox"/> Effective radiated power |
| <input checked="" type="checkbox"/> Antenna height above average terrain | <input checked="" type="checkbox"/> Channel                  |
| <input type="checkbox"/> Antenna location                                | <input checked="" type="checkbox"/> Antenna system           |
| <input type="checkbox"/> Other (summarize)                               |  |

File Number(s) **BPEDT-00419AAR**

**6. Exact location of transmitting antenna**

(a) Give address, city/state or if no address, specify distance and bearing relative to the nearest town or landmark.

**2 ROBERT E LEE BLVD ATOP STONE MOUNTAIN, STONE MOUNTAIN, GA**

(b) Geographical coordinates *(to nearest second)*. If mounted on element of an AM array, specify coordinates or center of array. Otherwise, specify tower location. Specify South Latitude and East Longitude where applicable; otherwise, North Latitude or West Longitude will be presumed. *(The Commission requires coordinates based on NAD 27.)*

Latitude	<b>33</b>	<sup>0</sup>	<b>48</b>	'	<b>18</b>	"	Longitude	<b>84</b>	<sup>0</sup>	<b>08</b>	'	<b>40</b>	"
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**7. (a) Elevation *(to the nearest meter)***

- |   |                   |
|---|-------------------|
| (1) of site above mean sea level;   | <u>496</u> meters |
| (2) of the top of supporting structure above ground (including antenna, all other appurtenances, and lighting, if any); and | <u>123</u> meters |
| (3) of the top of supporting structure above mean sea level [(a)(1) + (a)(2)].  | <u>619</u> meters |

(b) Height of radiation center: *(to the nearest meter)*

- |   |                   |
|---|-------------------|
| (1) above ground; and                       | <u>85</u> meters  |
| (2) above mean sea level [(a)(1) + (b)(1)]. | <u>581</u> meters |

**8. Attach as an Exhibit sketch(es) of the supporting structure, labeling all elevations required in item 7 above. If mounted on an AM directional array element, specify heights and orientations of all array towers, as well as location of any FM radiator.**

Exhibit No. <b>3*</b>
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Section V-D -D TV BROADCAST ENGINEERING DATA (Page 3)

9. Antenna

(a) Manufacturer **DIELECTRIC**

(b) Model No. **THA-C3-5/15-1**

(c) Is a directional antenna proposed?

☒ Yes ☐ No

If Yes, specify major lobe azimuth(s) **220** degrees True and attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c).

Exhibit No.  
**1-9\***

(d) Is electrical beam tilt proposed?

☒ Yes ☐ No

If Yes, specify **0.50** degrees electrical beam tilt and attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c).

Exhibit No.  
**1-9\***

(e) Is mechanical beam tilt proposed?

☐ Yes ☒ No

If Yes, specify **N/A** degrees mechanical beam tilt toward azimuth **N/A** True and attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c).

Exhibit No.  
**N/A**

(f) The proposed antenna is: (check only one box)

☐ Horizontally polarized ☒ Circularly polarized ☐ Elliptically polarized ☐ Other: \_\_\_\_\_

10. Will the antenna be mounted on an antenna structure which has been registered with the Commission, to include the proposed antenna installation?

☒ Yes ☐ No

If Yes, provide the seven digit registration number and, unless item 11 also applies, proceed to item

15. **1018776**

11. Has the owner of the antenna structure filed an application for registration with the Commission that will include the proposed facility?

☐ Yes ☐ No ☒ N/A

If yes, provide the date FCC Form 854 was filed and proceed to item 15. **N/A**

12. (if applicable) If the antenna structure is not yet registered but will be under the Commission's phased registration plan, has the FAA previously determined that the structure would not adversely affect safety in air navigation? **N/A**

☐ Yes ☐ No ☒ N/A

If Yes, proceed to item 15.

13. Antenna structure will be shielded by existing structures of a permanent and substantial character or by natural terrain or topographic features of equal or greater height, and would be located in the congested area of a city, town or settlement where it is evident beyond all reasonable doubt that the structure is so shielded that it will not adversely affect safety in air navigation. and therefore does not require registration.

☐ Yes ☐ No ☒ N/A

If yes, submit as an Exhibit a detailed explanation and/or diagram to support your claim and skip to item 15.

Exhibit No.  
**N/A**

**Section V-D -D TV BROADCAST ENGINEERING DATA (Page 4)**

14. Antenna structure does not otherwise meet FAA Notification criteria as defined under 47 C.F.R. Section 17.7 and therefore does not require registration.

☐ Yes ☐ No ☒ N/A

If Yes, give reason below.

**N/A**

15. Is the supporting structure the same as that of another station(s) or proposed in another pending application(s)?

☒ Yes ☐ No

If Yes, give call letter(s) or file number(s) or both, **WGTV-TV (BMLET-890727KG)**

- 16 Does the application propose to correct previous site coordinates?

☐ Yes ☒ No

If Yes, list old coordinates.

Latitude	°	'	"	Longitude	°	'	"
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17. Attach as an Exhibit a topographic map that shows clearly, legibly, and accurately, the location of the proposed transmitting antenna. This map must comply with the provisions of 47 C.F.R. Section 73.625(b). The map must further display clearly and legibly the original printed contour lines and data as well as latitude and longitude markings, and must bear a scale of distance in kilometers.

Exhibit No.  
**10\***

18. Attach as an Exhibit a map (*Sectional Aeronautical Chart or equivalent*) which shows clearly, legibly, and accurately, and with the original printed latitude and longitude markings and a scale of distance in kilometers:

Exhibit No.  
**11\***

- (a) the proposed transmitting location, and the radials along which profile graphs have been prepared;  
(b) the DTV coverage contour as established in 47 C.F.R. Section 73.625(b); and  
(c) the legal boundaries of the principal community to be served.

19. Terrain and coverage data (to be calculated in accordance with 47 C.F.R. Section 73.625(b))

Source of terrain data: (*check only one box below*)

- ☐ Linearly interpolated 30-second database (Source: \_\_\_\_\_)
- ☒ Linearly interpolated 3-second database (Source: **DEFENSE MAPPING AGENCY**)
- ☐ 7.5 minute topographic map \_\_\_\_\_
- ☐ Other (*briefly summarize*) \_\_\_\_\_

Section V-D -D TV BROADCAST ENGINEERING DATA (Page 5)

Radial bearing (degrees True)	Height of radiation center above average elevation of radial from 3m to 16m (meters)	Predicted distance to the DTV Coverage Contour  (kilometers)
*76°	<b>306.3</b>	<b>93.6</b>
0°	<b>285.6</b>	<b>94.8</b>
45°	<b>306.3</b>	<b>38.2</b>
90°	<b>311.9</b>	<b>102.2</b>
135°	<b>343.6</b>	<b>112.7</b>
180°	<b>320.4</b>	<b>113.4</b>
225°	<b>308.9</b>	<b>111.4</b>
270°	<b>285.2</b>	<b>111.1</b>
315°	<b>275.4</b>	<b>109.0</b>

\*Radial through principal community, if not one of the major radials. This radial should NOT be included in the calculation of HAAT.

20. Does the proposed facility satisfy the interference protection provisions of 47 C.F.R. Section 73.623(a)? (Applicable only if **Certification Checklist** items I (a), (b), or (c) are answered "No.") ☒ Yes ☐ No

If No, attach as an Exhibit justification therefore, including a summary of any related previously granted waivers.

Exhibit No.

**N/A**

21. If the proposed facility will not satisfy the coverage requirement of 47 C.F.R. Section 73.625, attach as an Exhibit justification therefore. (Applicable only if Certification Checklist item 3 is answered "No.")

Exhibit No.

**N/A**

22. Environmental Statement. (See 47CF.R. Section 1.1301 et seq.)

- (a) If a Commission grant of this application comes within 47 C.F.R. Section 1.1307, such that it may have a significant environmental impact, submit as an Exhibit an Environmental Assessment required by 47 C.F.R. Section 1.1311.

Exhibit No.

**N/A**

- (b) If No, explain briefly why not. **THE PROPOSED CONSTRUCTION WILL HAVE NO SIGNIFICANT ENVIRONMENTAL IMPACT AS DEFINED IN §1.1307 OF THE FCC RULES. \***

- (c) Pursuant to OST Bulletin No. 65, the applicant must explain in an Exhibit what steps will be taken to limit the RF radiation exposure to the public and to persons authorized access to the tower site. In addition, where there are multiple contributors to radio frequency radiation, you must certify that the established RF radiation exposure procedures will be coordinated with all


Exhibit No.

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**Section V-D -D TV BROADCAST ENGINEERING DATA (Page 6)**

**CERTIFICATION**

I certify that I have prepared this Section of this application on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name (Typed or Printed) <b>WILLIAM T. GODFREY</b>	Relationship to Applicant (e.g., Consulting Engineer) <b>TELECOMMUNICATIONS CONSULTANT</b>
Signature 	Address (include ZIP Code) <b>507 NW 80<sup>TH</sup> ST., SUITE C, GAINESVILLE, FL 32607</b>
Date <b>3/28/2001</b>	Telephone No. (include Area Code) <b>352-332-3157 e-mail: godfreyw@bellsouth.net</b>

**ENGINEERING TECHNICAL STATEMENT PREPARED BY WILLIAM T. GODFREY OF THE FIRM KESSLER AND GEHMAN ASSOCIATES, INC., TELECOMMUNICATIONS CONSULTING ENGINEERS IN CONNECTION WITH THE GEORGIA PUBLIC TELECOMMUNICATIONS COMMISSION'S (GPTC) DTV APPLICATION FOR A CONSTRUCTION PERMIT IN SUPPORT OF THE WGTV-DT PETITION FOR RULE MAKING WHICH SEEKS AUTHORIZATION TO AMEND THE DTV TABLE OF ALLOTMENTS IN ORDER TO SUBSTITUTE THE PROPOSED DTV VHF CHANNEL 4 FOR THE ALLOTTED DTV UHF CHANNEL 22 AT THE LICENSED SITE LOCATED IN STONE MOUNTAIN, GEORGIA.**

The firm Kessler and Gehman Associates, Inc., has been retained by the Georgia Public Telecommunications Commission (GPTC), Atlanta, Georgia in order to prepare engineering studies and the engineering portion of a digital television (DTV) application for a construction permit in support of the WGTV-DT Petition for Rule Making (PFRM) which respectfully requests and seeks authorization for an amendment of the DTV Table of Allotments by substituting the proposed DTV VHF Channel 4 for the allotted DTV UHF Channel 22 at the licensed site located in Stone Mountain, GA.

**Discussion**

The GPTC is the licensee of nine NTSC broadcast stations and has been assigned a paired DTV channel for each of the nine stations. The enclosed WGTV-DT application for the GPTC is just one of six PFRM applications requesting a change from its assigned UHF channel to a desired VHF channel. Kessler and Gehman Associates, Inc. initially conducted a detailed spacing study and determined that two of the nine GPTC stations presently would not be able to convert to VHF without causing above *de minimis*<sup>1</sup> interference to one or more applicable surrounding station(s). Of the nine DTV channels allotted to the GPTC, one station was assigned a VHF channel. Therefore, the GPTC is requesting a "Fleet VHF Conversion" of six of its nine broadcast stations in order to utilize improved signal coverage, heavily reduce support structure upgrade expenses, save on equipment and operational costs and continue digital VHF operation on the proposed channels after the DTV transition has ceased.

Authorization of the "Fleet VHF conversion" will equip the GPTC with seven VHF stations and will serve the public interest significantly with huge savings in tax dollars ranging from the substantial amount of money saved during the DTV purchasing/building phase to the magnitude of electrical savings that low power VHF transmitters offer over high power UHF transmitters. Conversion of the two remaining UHF channels to VHF shall be pursued after the DTV transition when spectrum becomes available so that the GPTC can simulcast efficiently on all nine VHF stations to the entire state of Georgia and beyond.

The objective of the enclosed DTV PFRM application is to amend the DTV Table of Allotments as follows: (1) substitute DTV Channel 4 for assigned DTV Channel 22; (2) change effective radiated power (ERP) from assigned 600.2kW to 17kW using a directional antenna (cardioid) with the main lobe oriented toward N220°E; and (3) change the antenna radiation center (R/C) height above average terrain (HAAT) from the assigned 326.0 meters to 304 meters.

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<sup>1</sup> *De minimis* interference is defined as interference to such stations affecting less than two percent of the population they serve. Where a station is receiving interference to between eight and ten percent of the population it would otherwise serve, additional interference is considered *de minimis* if it does not cause interference to the station to exceed the ten-percent threshold.

The GPTC is licensed to operate WGTW-TV on VHF, NTSC Channel 8(o) with an ERP of 316kW at an antenna height R/C of 326.0 meters AAT using a nondirectional antenna. The assigned principal community for WGTW is Athens, Georgia and the file number for WGTW-TV is BMLET-19890727KG.

According to the initial allotment plan and reference coordinates (DTV Table of Allotments) set forth in Appendix B of the *Sixth Report and Order* in MM Docket 87-268, FCC 97-115, adopted April 3, 1997, WGTW is allotted UHF, DTV Channel 22 at an antenna height R/C of 326.0 meters AAT and an ERP of 600.2kW in order to replicate its licensed VHF, Channel 8 Grade B Contour.

The GPTC has a construction permit for DTV Channel 22 (file number BPEDT-200000419AAR), which authorizes WGTW to operate with an ERP of 600.0kW at an antenna height radiation of 304.0 meters AAT using a nondirectional antenna. Specifically, the GPTC requests authorization to substitute WGTW-DT Channel 4 in lieu of the WGTW-DT Channel 22 construction permit, and to take any other steps necessary to enable WGTW to construct and ultimately operate its digital facilities on Channel 4.

### **Transmitter**

It is proposed to side-mount a Dielectric model THA-C3-5/15-1 circularly polarized, directional (cardioid oriented at N220E°), VHF, DTV antenna on the existing WGTW-TV support structure owned by the GPTC. The tower is registered with the FCC and has a registration number of 1018776. The support structure is located at 2 Robert E Lee Blvd, atop of Stone Mountain in Stone Mountain, GA. The proposed antenna height radiation center is 85 meters above ground level (AGL). The antenna's highest point will extend to 95 meters AGL and the overall height of the structure will extend to 123 meters AGL as depicted in Exhibit 3's elevation view of the support structure

### **Interference Studies**

The enclosed interference studies were computed using a Pentium Pro, 300 MHz, 128-megabyte, Pentium II processor. The calculations were performed using V-Soft Communication's Probe II, professional signal propagation software and interference studies program, which complies with the FCC mandated application-processing guidelines for digital television. This software is in accordance with the standards established in the FCC Public Notice #3060-0841 pertaining to DTV studies and DTV application preparation dated August 10, 1998.

Initial spacing studies, which considered DTV allotments (allot), DTV/NTSC licenses (lic), DTV/NTSC construction permits (cp), DTV/NTSC applications (app) and Class A/Class A-eligible low power television (LPTV) stations in the applicable areas surrounding Stone Mountain, GA revealed that VHF Channel 4 was a possible option for the GPTC station. After the spacing studies were completed additional studies were conducted to verify that the proposed station met the principal community coverage requirements of §73.625(a) located in the Federal Communications Commission's (FCC) rules. Exhibit 11 depicts the proposed WGTW-DT F(50,90) 28dBuV/m noise limited contour and verifies that the proposed station's noise limited contour fully encompasses the assigned principal community of Athens, GA. Exhibit 11 also depicts the proposed WGTW-DT F(50,90) 35dBuV/m noise limited contour and verifies that the proposed station's future (2005) 35dBuV/m principal community requirement has been met by completely encompassing the city of Athens, GA (100%) with its 35dBuV/m principal community contour. After it was determined that the existing and future principal community coverage requirements were met, we performed detailed interference studies on all applicable surrounding stations



using the terrain dependent Longley-Rice, point-to-point propagation algorithm which is detailed in the FCC's Office of Engineering and Technology Bulletin Number 69 (OET 69).

The initial interference studies predicted that the proposed WGTV-DT may cause interference to the stations listed below (Exhibit 12) and therefore, are the stations we performed detailed interference studies on to verify that all interference remains within the *de minimis* standard:

- WMAZ-DT (PFRM APP)
- WYFF-TV (LIC)
- WTVY-TV (LIC)
- WSMV-TV (LIC)
- WRBL-TV (LIC)
- WRCB-TV (LIC)

Exhibit 12 is a pictorial view of all applicable surrounding stations that are predicted to receive interference from WGTV-DT using the proposed azimuth pattern with an ERP of 17kW at an antenna R/C HAAT of 304.0 meters. Exhibit 12A is a tabular exhibit which identifies the potential stations that may receive interference from the proposed WGTV-DT, including Class A and Class A-eligible LPTV stations. Since this study did not take masking into account, each station was studied in detail in order to determine the exact amount of *unique interference*<sup>2</sup> caused to each station from the proposed WGTV-DT.

*NOTE: Starting from Exhibit 12, each pictorial exhibit will also be followed by a tabulation exhibit. For example, Exhibit 15 will be a pictorial exhibit and Exhibit 15A will be a tabulation exhibit.*

Exhibits 13 and 14 are studies showing interference from all stations to the WMAZ-DT PFRM application without and with WGTV-DT respectively. Exhibit 13 shows that without WGTV-DT, populations of zero (0.0) people are receiving DTV only interference and the interference free population is 683,534. Exhibit 14 shows that with WGTV-DT, populations of 167,456 people are receiving DTV only interference and the interference free population is 516,078. Therefore, the proposed WGTV-DT causes  $[683,534 \text{ (IX free without WGTV-DT)} - 516,078 \text{ (IX free with WGTV-DT)} = 167,456]$  interference to a total of 167,456 people. Exhibits 13 and 14 calculated the proposed WMAZ-DT Channel 4 station's baseline population to be 712,700. Therefore, the total amount of unique interference caused by the proposed WGTV-DT is  $[167,456/712,700]$  23.5%, which is not less than 2.0% and therefore does not comply with the 2% *de minimis* threshold requirement. Since the WMAZ-DT PFRM is now being challenged, it has been established that the proposed WGTV-DT Channel 4 will enter into a mutually exclusive status with the pending WMAZ-DT Channel 4 PFRM.

Exhibits 15 and 16 are studies showing interference from all stations to the WYFF-TV (lic) station without and with WGTV-DT respectively. Exhibit 15 shows that without WGTV-DT, populations of zero (0.0) people are receiving DTV only interference and the interference free population is 1,782,766. Exhibit 16 shows that with WGTV-DT, populations of 42,767 people are receiving DTV only interference and the interference free population is 1,739,999. Therefore, WGTV-DT causes  $[1,782,766 \text{ (IX free without WGTV-DT)} - 1,739,999 \text{ (IX free with WGTV-DT)} = 42,767]$  interference to a total of 42,767 people. Exhibits 15 and 16 calculated the WYFF-TV baseline population to be 2,191,733. Therefore, the total amount of unique interference caused by WGTV-DT is  $[42,767/2,191,733]$   $1.95 \leq 2.0\%$  and thus, all requirements under the definition of *de minimis* have been met. Exhibit 16 concludes that the total interference caused to WYFF-TV from all stations including WGTV-DT is  $[43,894/2,191,733]$   $2.0\% \leq 10\%$  and thus, all requirements under the definition of the *10% de-minimis* standard have been met.

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<sup>2</sup> Unique interference is defined as the predicted interference a DTV station would cause beyond the amount of interference "built into" the DTV allotment table.

Exhibits 17 and 18 are studies showing interference from all stations to the WTVY-TV (lic) station without and with WGTV-DT respectively. Exhibit 17 shows that without WGTV-DT, populations of zero (0.0) people are receiving DTV only interference and the interference free population is 768,741. Exhibit 18 shows that with WGTV-DT, populations of 3,050 people are receiving DTV only interference and the interference free population is 765,691. Therefore, WGTV-DT causes  $[768,741 \text{ (IX free without WGTV-DT)} - 765,691 \text{ (IX free with WGTV-DT)} = 3,050]$  interference to a total of 3,050 people. Exhibits 17 and 18 calculated the WTVY-TV baseline population to be 830,800. Therefore, the total amount of unique interference caused by WGTV-DT is  $[3,050/830,800] 0.367\% \leq 2.0\%$  and thus, all requirements under the definition of *de minimis* have been met. Exhibit 18 concludes that the total interference caused to WTVY-TV from all stations including WGTV-DT is  $[17,499/830,300] 2.11\% \leq 10\%$  and thus, all requirements under the definition of the *10% de-minimis* standard have been met.

Exhibits 19 and 20 are studies showing interference from all stations to the WSMV-TV (lic) station without and with WGTV-DT respectively. Exhibit 19 shows that without WGTV-DT, populations of 347 people are receiving DTV only interference and the interference free population is 1,571,827. Exhibit 20 shows that with WGTV-DT, populations of 28,602 people are receiving DTV only interference and the interference free population is 1,543,572. Therefore, WGTV-DT causes  $[1,571,827 \text{ (IX free without WGTV-DT)} - 1,543,572 \text{ (IX free with WGTV-DT)} = 28,255]$  interference to a total of 28,255 people. Exhibits 19 and 20 calculated the WSMV-TV baseline population to be 1,693,853. Therefore, the total amount of unique interference caused by WGTV-DT is  $[28,255/1,693,853] 1.67\% \leq 2.0\%$  and thus, all requirements under the definition of *de minimis* have been met. Exhibit 20 concludes that the total interference caused to WSMV-TV from all stations including WGTV-DT is  $[33,811/1,693,853] 2.0\% \leq 10\%$  and thus, all requirements under the definition of the *10% de-minimis* standard have been met.

Exhibits 21 and 22 are studies showing interference from all stations to the WRBL-TV (lic) station without and with WGTV-DT respectively. Exhibit 21 shows that without WGTV-DT, populations of zero (0.0) people are receiving DTV only interference and the interference free population is 910,970. Exhibit 22 shows that with WGTV-DT, populations of zero (0.0) people are receiving DTV only interference and the interference free population is still 910,970. Therefore, WGTV-DT causes  $[910,970 \text{ (IX free without WGTV-DT)} - 910,970 \text{ (IX free with WGTV-DT)} = 0.0]$  interference to a total of zero (0.0) people. Exhibits 21 and 22 calculated the WRLB-TV baseline population to be 1,343,351. Therefore, the total amount of unique interference caused by WGTV-DT is  $[0.0/1,343,351] 0.0\% \leq 2.0\%$  and thus, all requirements under the definition of *de minimis* have been met. Exhibit 22 concludes that the total interference caused to WRLB-TV from all stations including WGTV-DT is  $[7,100/1,343,351] 0.53\% \leq 10\%$  and thus, all requirements under the definition of the *10% de-minimis* standard have been met.

Exhibits 23 and 24 are studies showing interference from all stations to the WRCB-TV (lic) station without and with WGTV-DT respectively. Exhibit 23 shows that without WGTV-DT, populations of zero (0.0) people are receiving DTV only interference and the interference free population is 1,025,309. Exhibit 24 shows that with WGTV-DT, populations of zero (0.0) people are receiving DTV only interference and the interference free population is still 1,025,309. Therefore, WGTV-DT causes  $[1,025,309 \text{ (IX free without WGTV-DT)} - 1,025,309 \text{ (IX free with WGTV-DT)} = 0.0]$  interference to a total of zero (0.0) people. Exhibits 23 and 24 calculated the WRCB-TV baseline population to be 1,248,427. Therefore, the total amount of unique interference caused by WGTV-DT is  $[0.0/1,248,427] 0.0\% \leq 2.0\%$  and thus, all requirements under the definition of *de minimis* have been met. Exhibit 24 concludes that the total interference caused to WRCB-TV from all stations including WGTV-DT is

[0.0/1,248,427]  $0.0\% \leq 10\%$  and thus, all requirements under the definition of the *10% de-minimis* standard have been met.

### **Exhibits**

Exhibits 1 and 2 represent WGTV-DT's administration data, antenna and antenna structure specifications as per §V-D item 9 in the DTV Broadcasting Engineering Data portion of the application regarding directional antennas and beam tilt.

Exhibit 3 depicts the profile view of the proposed antenna on the antenna structure with all the appropriate elevations as per §V-D item 8 in the DTV Broadcasting Engineering Data portion of the application regarding supporting structures and elevations.

Exhibits 4 and 5 display the azimuth pattern and the azimuth pattern tabulation respectively.

Exhibits 6 and 7 display the elevation pattern and the elevation pattern tabulation respectively.

Exhibits 8 and 9 display the ERP/dBk pattern and tabulation respectively.

Exhibit 10 depicts the site location of the proposed WGTV-DT site on a 7.5-Minute (Series) Topographic Map as per §V-D item 17 in the DTV Broadcasting Engineering Data portion of the application regarding topographic maps.

Exhibit 11 depicts the proposed WGTV-DT coverage contour, boundaries of the principal community to be served, and the proposed transmitting location with radials every 45° as per §V-D item 18 in the DTV Broadcasting Engineering Data portion of the application regarding Sectional Aeronautical Charts.

Exhibits 12 through 24 are detailed interference studies and demographic results of WGTV-DT to all applicable stations.

### **Environmental Impact**

The proposed construction will have no significant environmental impact as defined in §1.1307 of the FCC Rules. The DTV transmitter, 3-1/8 inch (50-ohm) transmission line and antenna system will produce an ERP of 17 kW. Assuming that the maximum lobe of radiation is oriented at the base of the tower, it will produce a power density six feet above the ground of  $0.016 \text{ mW/cm}^2$ . This is only 1.60% of the maximum permissible exposure (MPE) authorized by the American National Standards Institute (ANSI). Since the proposed operation of WGTV-DT Channel 4 will not exceed 5.0% of the MPE limit for population/uncontrolled at any point on the ground, WGTV-DT is not considered to be a "significant contributor" to the RF exposure environment pursuant to OET Bulletin 65, Edition 97-01. Therefore, contributions of exposure from other sources were not accounted for in this analysis. It is safe to conclude that the emissions will be insignificant and well within the maximum allowable requirements.

If other antennas are placed on the tower in the future, the applicant will cooperate with those users by reducing or completely terminating the power to the antenna when maintenance workers are in danger from the electromagnetic radiation emanating from the antenna. The tower will be enclosed within a fence with warning signs posted at the locked gate.

### **Certification**

The applicant accepts full responsibility for the elimination of any objectionable interference including that caused by intermodulation to facilities in existence or authorized prior to the grant of this application.

This technical statement was prepared by William T. Godfrey, Telecommunications Consultant with Kessler and Gehman Associates, Inc. having offices in Gainesville, Florida and has been working in the field of radio and television broadcast consulting since 1998. He graduated from the University of North Florida with a Bachelor of Arts degree in Criminal Justice and a minor in Mathematics and received a Commission in the Aviation Branch of the United States Army in 1993. As a Professional in the field of Telecommunications and as a Captain in the United States Army, he states under penalty of perjury that the information contained in this report is true and correct to the best of his knowledge and belief.

A handwritten signature in black ink, appearing to read "William T. Godfrey", is written over a horizontal line.

WILLIAM T. GODFREY  
Telecommunications Consultant

29 March, 2001

**WGTV-DT  
ATHENS, GA**

**ENGINEERING SPECIFICATIONS**

**A. Transmitter Site:**

Geographic coordinates determined by licensed surveyor:

North Latitude ..... 33° 48' 18"  
West Longitude ..... 84° 08' 40"

Transmitter Site Address:   **2 Robert E. Lee Blvd. atop Stone Mountain  
Stone Mountain, Georgia**

**B. Main Studio Site Address:   260   14<sup>th</sup> Street N.W., Atlanta, GA 30318.**

**C. Proposed Facility:**

DTV Channel                      Number ..... 4  
Frequency ..... 66-72 MHz

**D. Antenna Height:**

Height of Site Above Mean Sea Level (AMSL) ..... 496.0 M  
Overall Height of Structure Above Ground ..... 123.0 M  
    (including all appurtenances)  
Overall Height of Structure Above Mean Sea Level ..... 619.0 M  
    (including all appurtenances)  
Height of Site Above Average Terrain ..... 219.0 M  
Antenna Height Radiation Center (R/C) Above Ground ..... 85.0 M  
Antenna Height R/C Above Mean Sea Level ..... 581.0 M  
Average of All Non-Odd Radials ..... 277.0 M  
Antenna Height R/C Above Average Terrain ..... 304.0 M

**E. System Parameters – Horizontal Polarization:**

Transmitter Power Required ..... 2.35 kW  
Maximum Power Input to Antenna ..... 1.95 kW  
Total System Loss ..... 0.80 dB  
Transmission Line Efficiency ..... 83.2%  
Maximum Antenna Gain in Beam Maximum ..... 9.40 dB  
Maximum Antenna Gain in Horizontal Plane ..... 9.34 dB  
Maximum Effective Radiated Power ..... 12.30 dBk  
    In Beam Maximum ..... 17.0 kW  
Maximum Effective Radiated Power ..... 12.24 dBk  
    In Horizontal Plane ..... 16.75 kW

**WGTV-DT  
ATHENS, GA**

**DATA FOR PROPOSED DTV  
DIRECTIONAL TRANSMITTING ANTENNA**

- A. **Antenna:** Dielectric THA-C3-5/15-1, Circularly Polarized, Directional (Cardioid)), Side-mount Antenna.
- B. **Electrical Beam Tilt:** 0.5°
- C. **Mechanical Beam Tilt:** None.
- D. 

<b><u>Maximum Power Gain</u></b>	<b><u>Horizontal Polarization</u></b>
Maximum:	8.71 (9.40 dB)
Horizontal:	8.59 (9.34 dB)
- E. **Length:** 66.0 feet (20.1 meters) not including appurtenances.
- F. **Average Power DTV:** 2.35 kW
- G. **Null Fill:** 7.7%
- H. **Transmission Line:** 3 1/8" 50-ohm Heliax.
- I. **Transmission Line Loss:** 0.119 dB/100-feet
- J. **Total Transmission Line:** 675 feet
- K. **Transmission Line Attenuation:** 0.80 dB

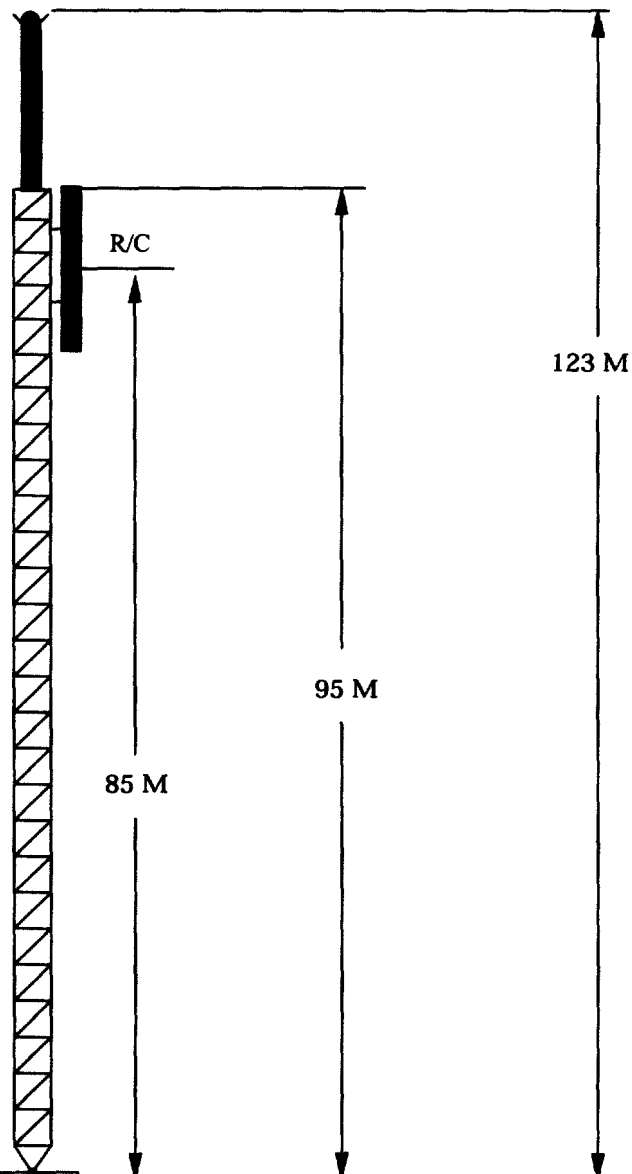
## ELEVATION VIEW

EXISTING  
ANDREW  
ATW16V3-DTO/S-8  
ANTENNA

PROPOSED  
DIELECTRIC  
THA-C3-5/15-1  
ANTENNA

GUYED TOWER AND  
ANTENNA TO BE  
LIGHTED AND PAINTED  
IN ACCORDANCE WITH  
FCC REQUIREMENTS

SITE ELEVATION: 496 M AMSL



OVERALL HEIGHT AGL: 123 M  
OVERALL HEIGHT AMSL: 619 M  
DTV RADIATION CENTER AGL: 85 M  
DTV RADIATION CENTER AMSL: 581 M  
DTV RADIATION CENTER AAT: 304 M  
AVERAGE TERRAIN: 277 M

COORDINATES NAD 27:  
N. LATITUDE 33 ° 48 ' 18 "  
W. LONGITUDE 84 ° 08 ' 40 "

Antenna Structure Registration Number

1018706

NOTE: NOT TO SCALE

**KESSLER & GEHMAN**

TELECOMMUNICATIONS CONSULTING ENGINEERS  
507 N.W. 60th Street, Suite C  
Gainesville, Florida 32607

WGTV-DT

ATHENS, GEORGIA

3/27/2001

EXHIBIT 3



Date	28 Mar 2001		
Call Letters	WGTV-DT	Channel	4
Location	Athens		
Customer	GPTC		
Antenna Type	THA-C3-5/15-1		

Exhibit No.  
Exhibit 4

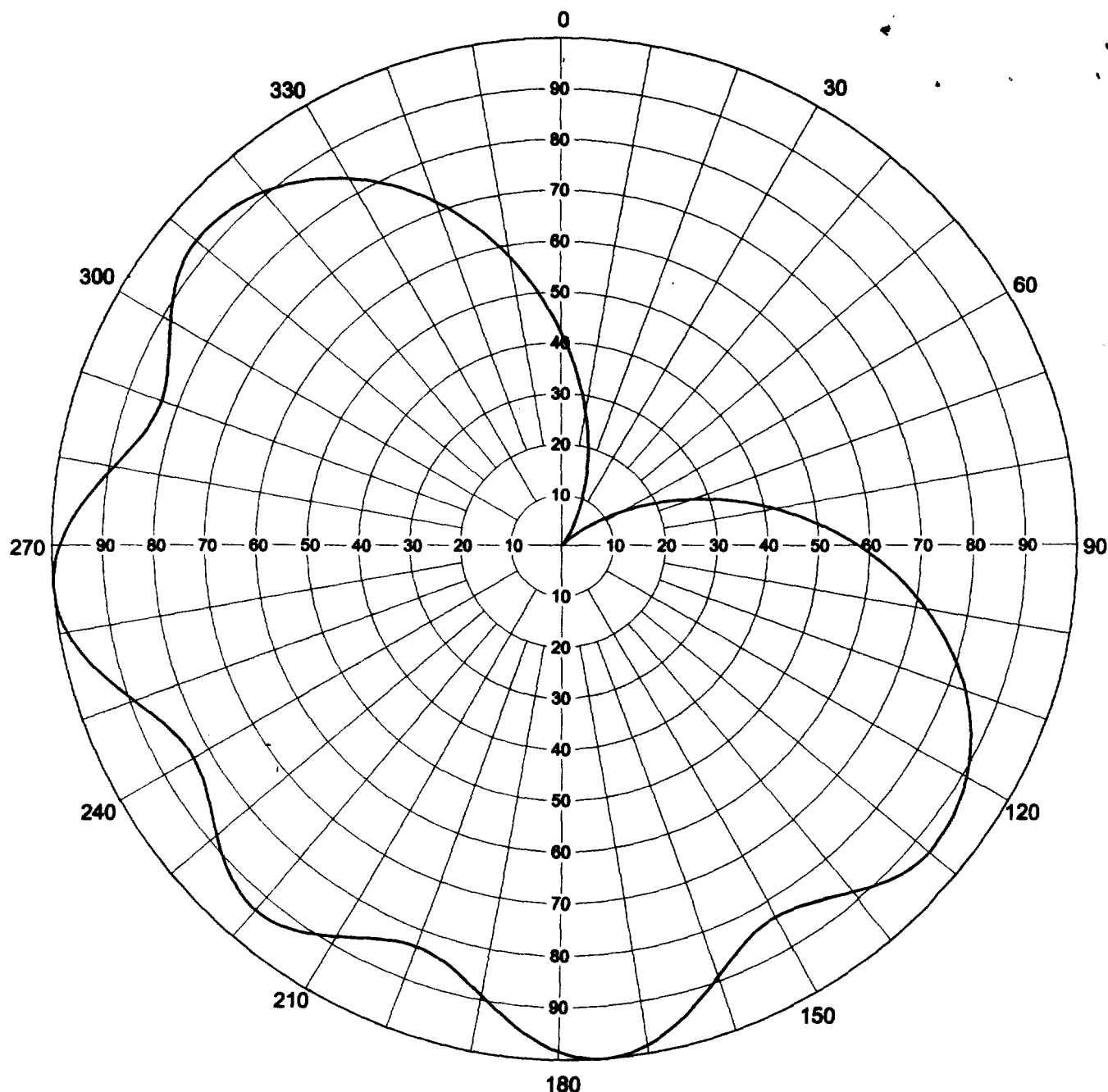
### AZIMUTH PATTERN

RMS Gain at Main Lobe  
Calculated / Measured

1.70 (2.30 dB)  
Calculated

Frequency  
Drawing #

69 MHz  
THA-C3



Remarks:

Exhibit 4





Exhibit No.  
Exhibit 5

Date 28 Mar 2001  
Call Letters WGTV-DT Channel 4  
Location Athens  
Customer GPTC  
Antenna Type THA-C3-5/15-1

# TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing # THA-C3

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
0	0.421	45	0.012	90	0.578	135	0.917	180	0.984	225	0.917	270	0.984	315	0.927
1	0.405	46	0.016	91	0.593	136	0.911	181	0.978	226	0.911	271	0.978	316	0.924
2	0.390	47	0.021	92	0.608	137	0.905	182	0.970	227	0.905	272	0.970	317	0.921
3	0.374	48	0.027	93	0.623	138	0.898	183	0.962	228	0.898	273	0.962	318	0.917
4	0.359	49	0.033	94	0.637	139	0.891	184	0.953	229	0.891	274	0.953	319	0.913
5	0.343	50	0.040	95	0.652	140	0.883	185	0.943	230	0.883	275	0.943	320	0.908
6	0.328	51	0.047	96	0.666	141	0.876	186	0.933	231	0.876	276	0.933	321	0.902
7	0.313	52	0.055	97	0.680	142	0.868	187	0.923	232	0.868	277	0.923	322	0.897
8	0.298	53	0.064	98	0.694	143	0.861	188	0.912	233	0.861	278	0.912	323	0.890
9	0.283	54	0.073	99	0.707	144	0.855	189	0.901	234	0.855	279	0.901	324	0.884
10	0.268	55	0.082	100	0.720	145	0.849	190	0.891	235	0.849	280	0.891	325	0.877
11	0.254	56	0.092	101	0.733	146	0.844	191	0.881	236	0.844	281	0.881	326	0.869
12	0.239	57	0.102	102	0.746	147	0.839	192	0.872	237	0.839	282	0.872	327	0.861
13	0.225	58	0.113	103	0.758	148	0.836	193	0.863	238	0.836	283	0.863	328	0.852
14	0.212	59	0.124	104	0.770	149	0.834	194	0.856	239	0.834	284	0.856	329	0.844
15	0.198	60	0.135	105	0.782	150	0.833	195	0.849	240	0.833	285	0.849	330	0.834
16	0.185	61	0.147	106	0.793	151	0.834	196	0.843	241	0.834	286	0.843	331	0.825
17	0.172	62	0.159	107	0.804	152	0.836	197	0.839	242	0.836	287	0.839	332	0.814
18	0.159	63	0.172	108	0.814	153	0.839	198	0.836	243	0.839	288	0.836	333	0.804
19	0.147	64	0.185	109	0.825	154	0.843	199	0.834	244	0.843	289	0.834	334	0.793
20	0.135	65	0.198	110	0.834	155	0.849	200	0.833	245	0.849	290	0.833	335	0.782
21	0.124	66	0.212	111	0.844	156	0.856	201	0.834	246	0.856	291	0.834	336	0.770
22	0.113	67	0.225	112	0.852	157	0.863	202	0.836	247	0.863	292	0.836	337	0.758
23	0.102	68	0.239	113	0.861	158	0.872	203	0.839	248	0.872	293	0.839	338	0.746
24	0.092	69	0.254	114	0.869	159	0.881	204	0.844	249	0.881	294	0.844	339	0.733
25	0.082	70	0.268	115	0.877	160	0.891	205	0.849	250	0.891	295	0.849	340	0.720
26	0.073	71	0.283	116	0.884	161	0.901	206	0.855	251	0.901	296	0.855	341	0.707
27	0.064	72	0.298	117	0.890	162	0.912	207	0.861	252	0.912	297	0.861	342	0.694
28	0.055	73	0.313	118	0.897	163	0.923	208	0.868	253	0.923	298	0.868	343	0.680
29	0.047	74	0.328	119	0.902	164	0.933	209	0.876	254	0.933	299	0.876	344	0.666
30	0.040	75	0.343	120	0.908	165	0.943	210	0.883	255	0.943	300	0.883	345	0.652
31	0.033	76	0.359	121	0.913	166	0.953	211	0.891	256	0.953	301	0.891	346	0.637
32	0.027	77	0.374	122	0.917	167	0.962	212	0.898	257	0.962	302	0.898	347	0.623
33	0.021	78	0.390	123	0.921	168	0.970	213	0.905	258	0.970	303	0.905	348	0.608
34	0.016	79	0.405	124	0.924	169	0.978	214	0.911	259	0.978	304	0.911	349	0.593
35	0.012	80	0.421	125	0.927	170	0.984	215	0.917	260	0.984	305	0.917	350	0.578
36	0.008	81	0.437	126	0.929	171	0.990	216	0.922	261	0.990	306	0.922	351	0.562
37	0.005	82	0.453	127	0.931	172	0.994	217	0.927	262	0.994	307	0.927	352	0.547
38	0.002	83	0.469	128	0.932	173	0.997	218	0.930	263	0.997	308	0.930	353	0.531
39	0.001	84	0.484	129	0.933	174	0.999	219	0.932	264	0.999	309	0.932	354	0.516
40	0.000	85	0.500	130	0.933	175	1.000	220	0.933	265	1.000	310	0.933	355	0.500
41	0.001	86	0.516	131	0.932	176	0.999	221	0.932	266	0.999	311	0.933	356	0.484
42	0.002	87	0.531	132	0.930	177	0.997	222	0.930	267	0.997	312	0.932	357	0.469
43	0.005	88	0.547	133	0.927	178	0.994	223	0.927	268	0.994	313	0.931	358	0.453
44	0.008	89	0.562	134	0.922	179	0.990	224	0.922	269	0.990	314	0.929	359	0.437

Remarks:

Exhibit 5

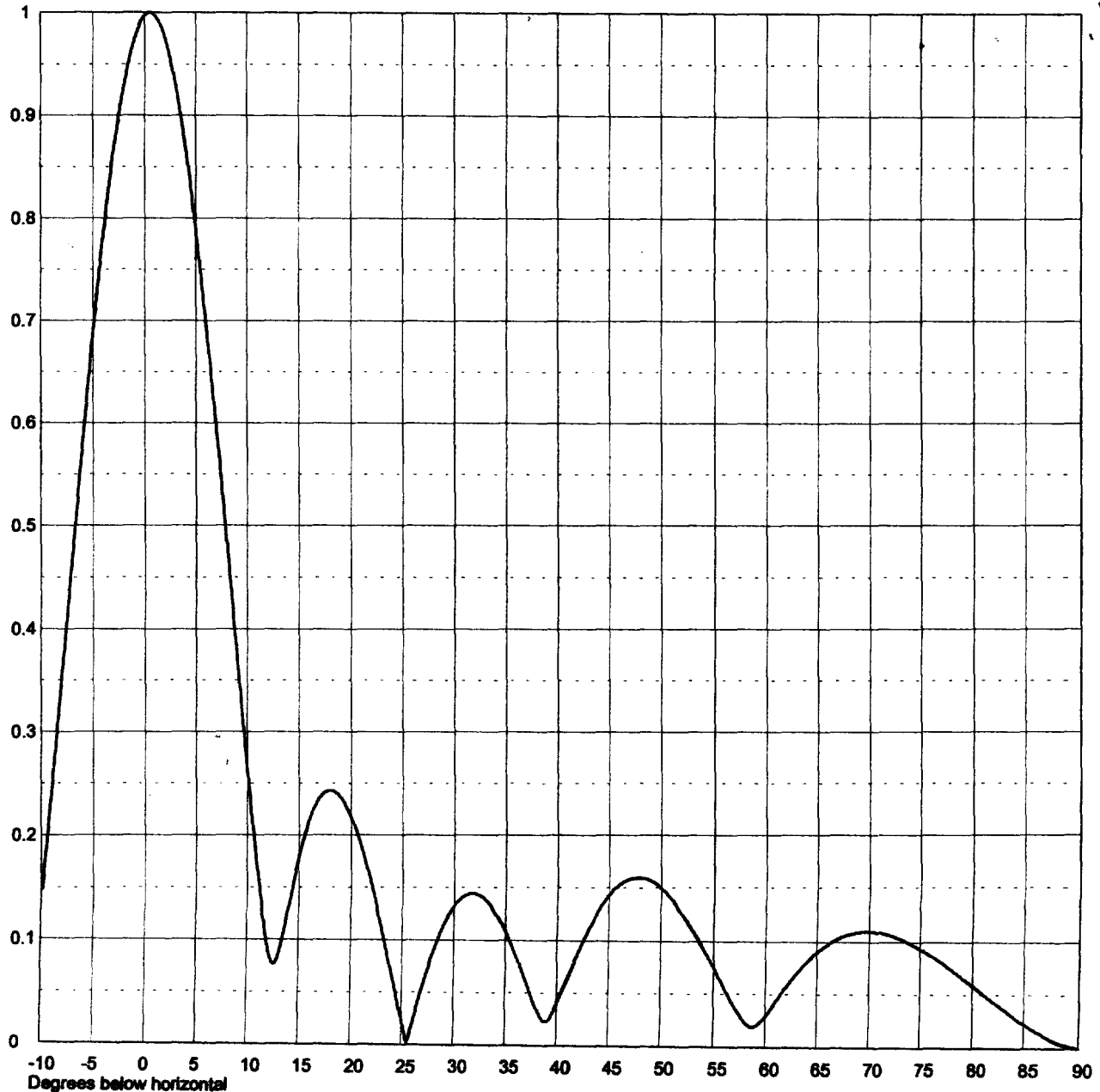


Exhibit No.  
Exhibit 6

Date	28 Mar 2001	
Call Letters	WGTV-DT	Channel 4
Location	Athens	
Customer	GPTC	
Antenna Type	THA-C3-5/15-1	

### ELEVATION PATTERN

RMS Gain at Main Lobe	5.1 (7.08 dB)	Beam Tilt	0.50 Degrees
RMS Gain at Horizontal	5.1 (7.08 dB)	Frequency	69.00 MHz
Calculated / Measured	Calculated	Drawing #	05H051050-90



Remarks:

Exhibit 6



Exhibit No.  
Exhibit 7

Date **28 Mar 2001**  
 Call Letters **WGTV-DT** Channel **4**  
 Location **Athens**  
 Customer **GPTC**  
 Antenna Type **THA-C3-5/15-1**

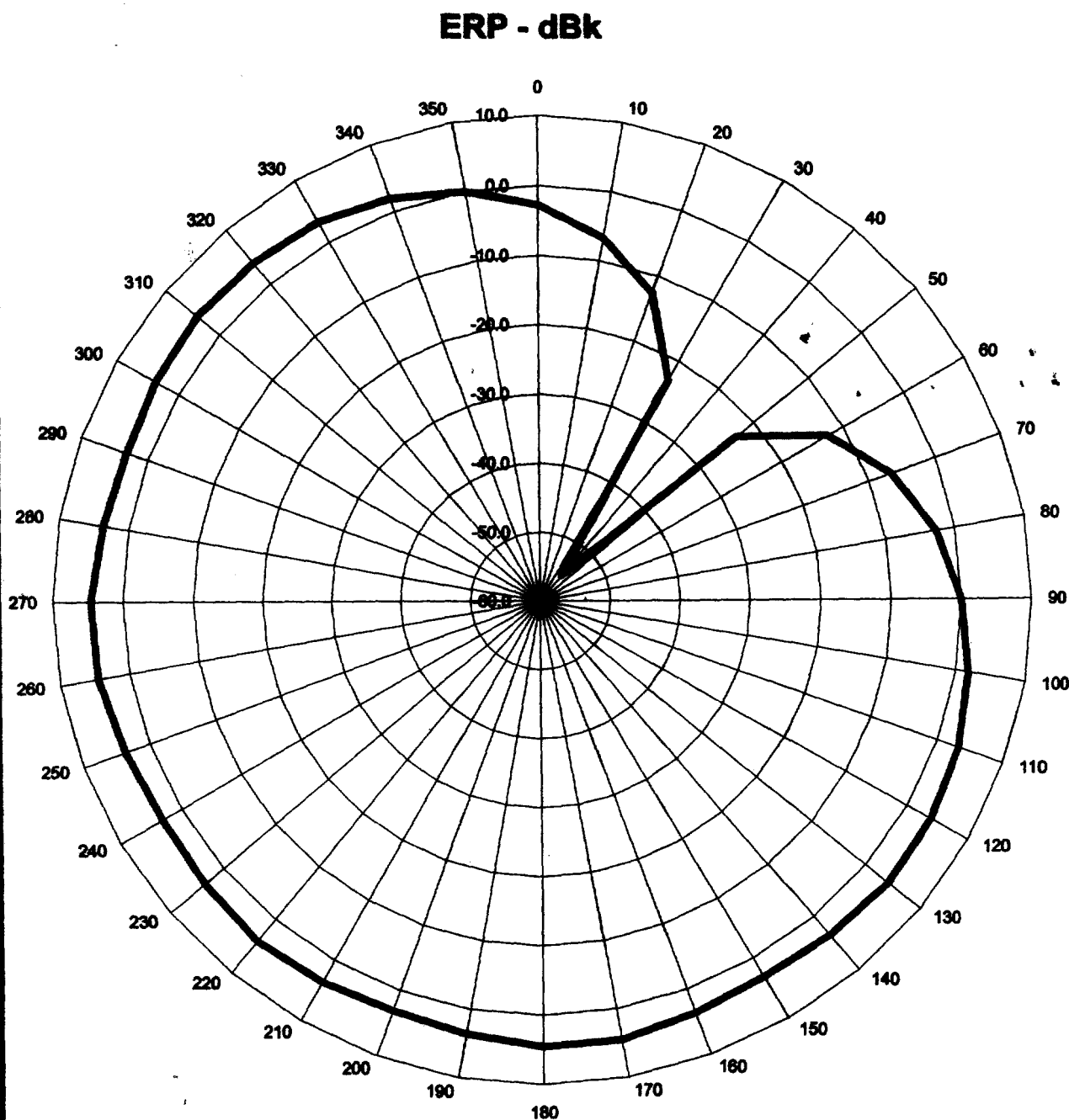
## TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing # **05H051050-90**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.138	2.4	0.960	10.6	0.202	30.5	0.138	51.0	0.139	71.5	0.108
-9.5	0.189	2.6	0.951	10.8	0.183	31.0	0.142	51.5	0.133	72.0	0.107
-9.0	0.243	2.8	0.942	11.0	0.165	31.5	0.144	52.0	0.126	72.5	0.105
-8.5	0.299	3.0	0.931	11.5	0.123	32.0	0.144	52.5	0.118	73.0	0.103
-8.0	0.356	3.2	0.920	12.0	0.091	32.5	0.142	53.0	0.110	73.5	0.101
-7.5	0.414	3.4	0.908	12.5	0.077	33.0	0.138	53.5	0.102	74.0	0.099
-7.0	0.471	3.6	0.896	13.0	0.084	33.5	0.133	54.0	0.093	74.5	0.096
-6.5	0.528	3.8	0.882	13.5	0.106	34.0	0.126	54.5	0.084	75.0	0.093
-6.0	0.584	4.0	0.868	14.0	0.131	34.5	0.117	55.0	0.075	75.5	0.090
-5.5	0.638	4.2	0.853	14.5	0.156	35.0	0.108	55.5	0.065	76.0	0.087
-5.0	0.690	4.4	0.838	15.0	0.179	35.5	0.097	56.0	0.056	76.5	0.084
-4.5	0.739	4.6	0.822	15.5	0.198	36.0	0.085	56.5	0.047	77.0	0.081
-4.0	0.786	4.8	0.805	16.0	0.215	36.5	0.073	57.0	0.038	77.5	0.077
-3.5	0.828	5.0	0.788	16.5	0.227	37.0	0.060	57.5	0.030	78.0	0.074
-3.0	0.867	5.2	0.770	17.0	0.236	37.5	0.047	58.0	0.023	78.5	0.070
-2.8	0.881	5.4	0.752	17.5	0.241	38.0	0.035	58.5	0.019	79.0	0.066
-2.6	0.895	5.6	0.733	18.0	0.243	38.5	0.026	59.0	0.020	79.5	0.062
-2.4	0.908	5.8	0.714	18.5	0.241	39.0	0.023	59.5	0.024	80.0	0.059
-2.2	0.920	6.0	0.694	19.0	0.236	39.5	0.029	60.0	0.030	80.5	0.055
-2.0	0.931	6.2	0.674	19.5	0.228	40.0	0.039	60.5	0.037	81.0	0.051
-1.8	0.941	6.4	0.654	20.0	0.217	40.5	0.052	61.0	0.044	81.5	0.047
-1.6	0.951	6.6	0.633	20.5	0.204	41.0	0.064	61.5	0.051	82.0	0.043
-1.4	0.960	6.8	0.612	21.0	0.188	41.5	0.077	62.0	0.057	82.5	0.040
-1.2	0.968	7.0	0.590	21.5	0.171	42.0	0.089	62.5	0.064	83.0	0.036
-1.0	0.975	7.2	0.569	22.0	0.152	42.5	0.100	63.0	0.070	83.5	0.032
-0.8	0.981	7.4	0.547	22.5	0.132	43.0	0.111	63.5	0.076	84.0	0.029
-0.6	0.986	7.6	0.525	23.0	0.110	43.5	0.120	64.0	0.081	84.5	0.025
-0.4	0.991	7.8	0.503	23.5	0.089	44.0	0.129	64.5	0.086	85.0	0.022
-0.2	0.994	8.0	0.481	24.0	0.066	44.5	0.136	65.0	0.090	85.5	0.019
0.0	0.997	8.2	0.459	24.5	0.044	45.0	0.143	65.5	0.094	86.0	0.016
0.2	0.999	8.4	0.436	25.0	0.022	45.5	0.149	66.0	0.098	86.5	0.013
0.4	1.000	8.6	0.414	25.5	0.002	46.0	0.153	66.5	0.101	87.0	0.010
0.6	1.000	8.8	0.392	26.0	0.020	46.5	0.156	67.0	0.103	87.5	0.008
0.8	0.999	9.0	0.370	26.5	0.039	47.0	0.158	67.5	0.105	88.0	0.006
1.0	0.997	9.2	0.348	27.0	0.057	47.5	0.159	68.0	0.107	88.5	0.004
1.2	0.994	9.4	0.326	27.5	0.074	48.0	0.159	68.5	0.108	89.0	0.002
1.4	0.991	9.6	0.305	28.0	0.089	48.5	0.158	69.0	0.109	89.5	0.001
1.6	0.986	9.8	0.283	28.5	0.103	49.0	0.156	69.5	0.110	90.0	0.000
1.8	0.981	10.0	0.262	29.0	0.115	49.5	0.153	70.0	0.110		
2.0	0.975	10.2	0.242	29.5	0.125	50.0	0.149	70.5	0.110		
2.2	0.968	10.4	0.222	30.0	0.132	50.5	0.145	71.0	0.109		

Remarks:

Exhibit 7



**KESSLER & GEHMAN**  
TELECOMMUNICATIONS CONSULTING ENGINEERS  
507 N.W. 60th Street, Suite C  
Gainesville, Florida 32607

**WGTV-DT CHANNEL 4**  
**ATHENS, GA**

**3/27/2001**

**EXHIBIT 8**

# WGTV-DT CHANNEL 4

ATHENS, GEORGIA

## TABULATION OF RELATIVE FIELDS FOR PROPOSED DIRECTIONAL ANTENNA

<u>AZIMUTH</u>	<u>RELATIVE FIELD</u>	<u>AZIMUTH</u>	<u>RELATIVE FIELD</u>
N000°E	0.421	N180°E	0.984
N010°E	0.268	N190°E	0.891
N020°E	0.135	N200°E	0.833
N030°E	0.040	N210°E	0.883
N040°E	0.001	N220°E	0.933
N050°E	0.040	N230°E	0.883
N060°E	0.135	N240°E	0.833
N070°E	0.268	N250°E	0.891
N080°E	0.421	N260°E	0.984
N090°E	0.578	N270°E	0.984
N100°E	0.720	N280°E	0.891
N110°E	0.834	N290°E	0.833
N120°E	0.908	N300°E	0.883
N130°E	0.933	N310°E	0.933
N140°E	0.883	N320°E	0.908
N150°E	0.833	N330°E	0.834
N160°E	0.891	N340°E	0.720
N170°E	0.984	N350°E	0.578

MINIMUM OF 0.001 AT N040°E

MAXIMA OF 1.000 AT N175°E & N265°E

**KESSLER & GEHMAN**

TELECOMMUNICATIONS CONSULTING ENGINEERS

507 N.W. 60th Street, Suite C

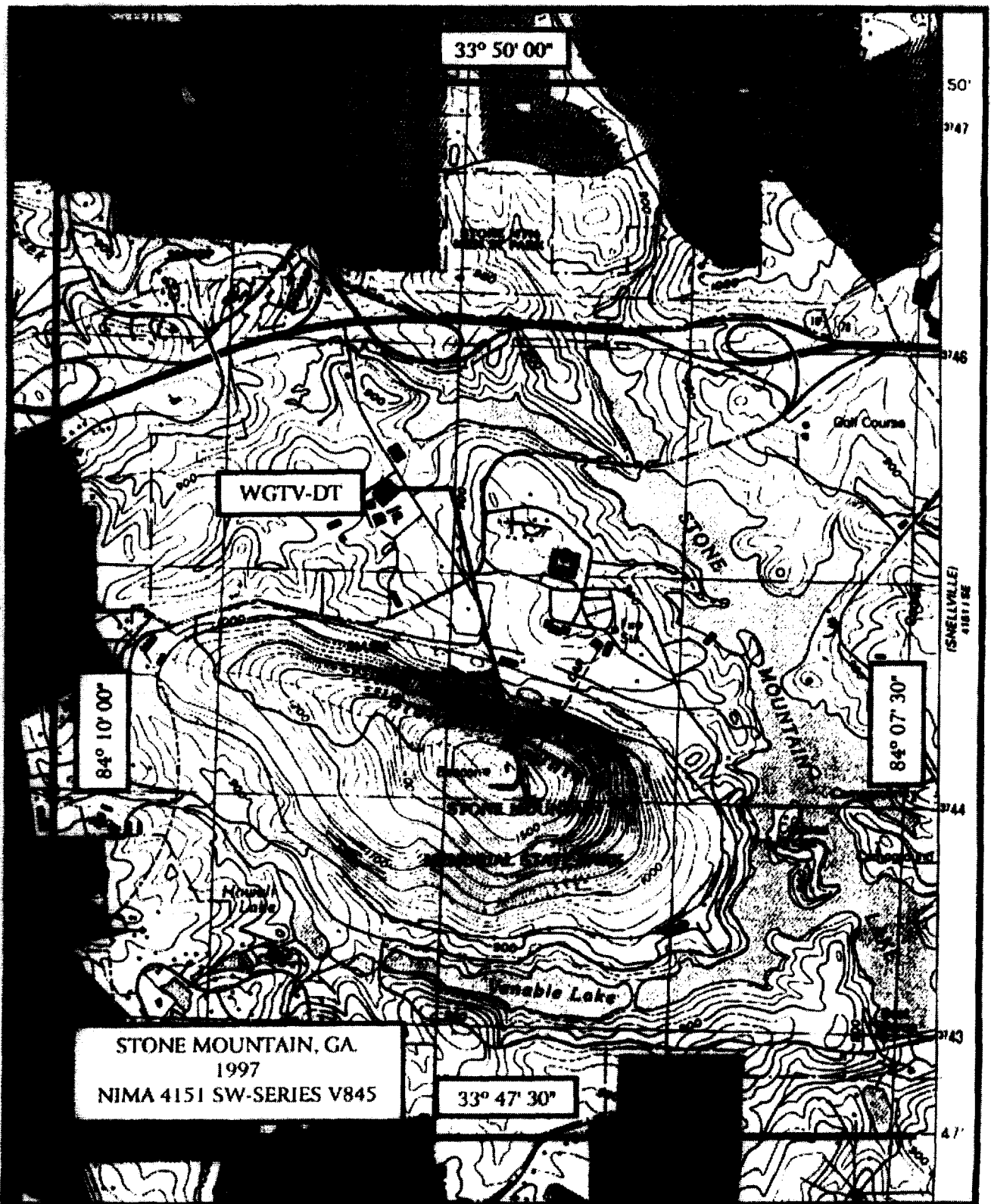
Gainesville, Florida 32607

**WGTV-DT CHANNEL 4**

**ATHENS, GA**

3/27/2001

EXHIBIT 9



STONE MOUNTAIN, GA.  
1997  
NIMA 4151 SW-SERIES V845

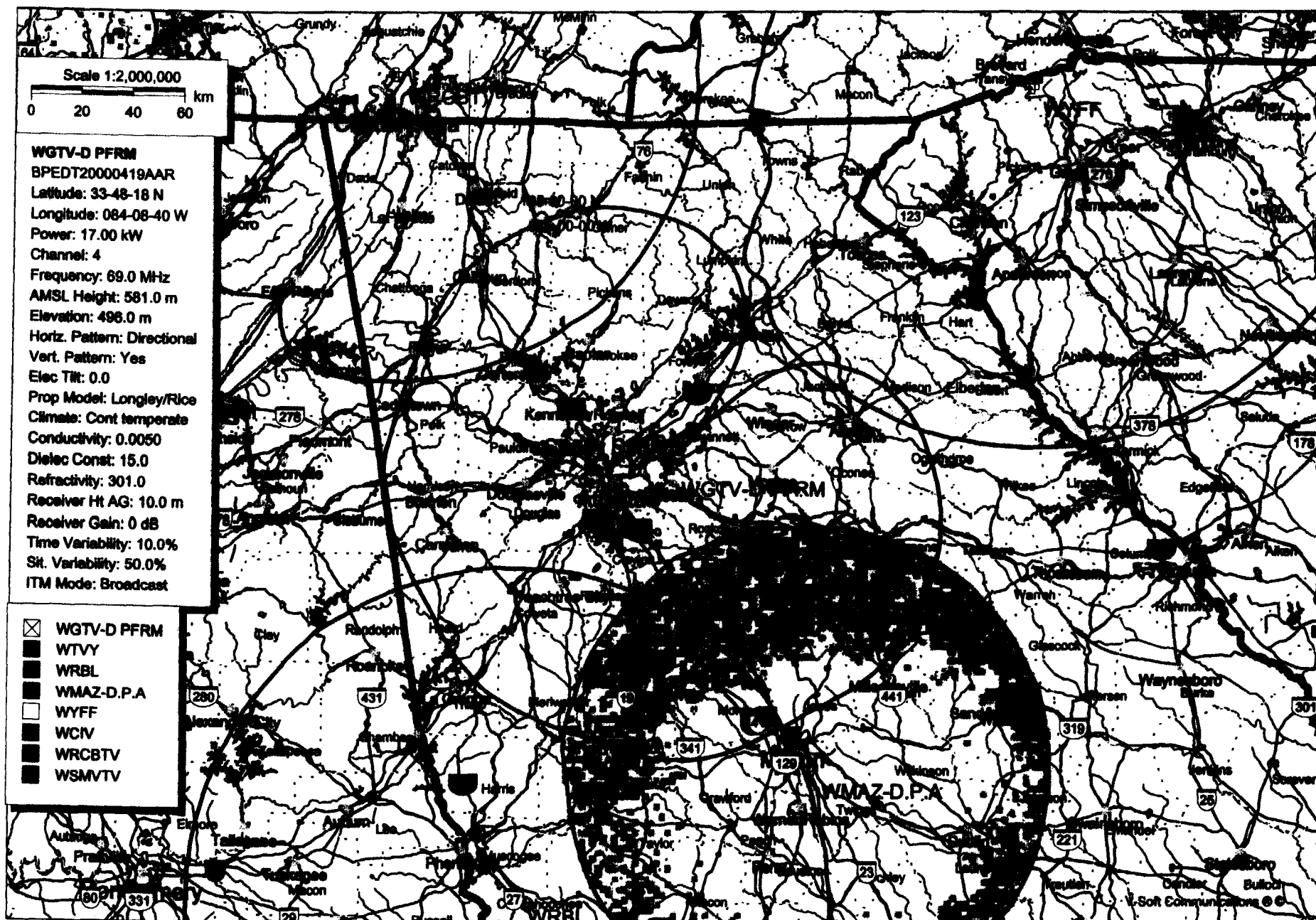
**KESSLER & GEHMAN**  
TELECOMMUNICATIONS CONSULTING ENGINEERS  
507 N. W. 60th Street, Suite C  
Gainesville, Florida 32607

WGTV-DT  
ATHENS, GEORGIA

1/24/2001

EXHIBIT 10







Kessler and Gehman Associates, Inc.

WGTV-D PFRM (4) Athens, GA  
TV Outgoing Interference Study  
Signal Resolution: 2 km  
Consider NTSC Taboo: Yes  
KWX error points are considered to  
be interference free coverage.  
# of radials computed for contours: 72  
Contours calculated using 8 radial HAAT.  
LR Profile Spacing Increment: 1.0 km  
Masked interference points are being  
counted as interference.  
Using NTSC lptv/translators D/U rules.

Study Date: 3/28/01  
TV Database Date: 03-27-01

Stations which receive interference:

Call Letters	H Units	Population	Area (sq. km)
WTVY	7821	17499	1564.96
WRBL	2783	7100	44.88
WMAZ-D.P.A	75090	190335	10303.67
WYFF	17720	43761	2404.20
WRCBTV	0	0	4.04
WSMVTV	14061	33459	771.26

Totals for WGTV-D PFRM

Total population to which interference is caused: 292154  
Total number of housing units to which interference is caused: 117475

	Housing Units	Population
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Georgia		
Baker County		
WTVY	267	653
Baldwin County		
WMAZ-D.P.A	1,666	5,153
Banks County		
WYFF	256	581
Butts County		
WMAZ-D.P.A	4,604	13,262
Calhoun County		
WTVY	434	1,101
Clarke County		
WYFF	329	836
Clay County		
WTVY	115	203
Crawford County		
WMAZ-D.P.A	60	183